Apparently on the good old principle of leaving the best until the last, the editors of the volume have reserved for a concluding paper the learned and able *Report on Hæmophilia*, with a note on the hereditary descent of colour-blindness, by Dr. J. WICKHAM LEGG. This valuable essay is illustrated by a genealogical tree of a "Bleeder" family for five generations, and a similar tree of a colour-blind family for six generations. These representatives of the original tree of knowledge exhibit several curious phenomena observable in the transmission of inherited disease to remote posterity, and suggest how unspeakably useful to every family would be similar genealogical tables showing when and where consumption, gout, apoplexy, and all the other "ills our flesh is heir to," had assailed their ancestors. We heartily welcome such publications, since they can scarcely fail to promote a more general realization of the great truth which we have long laboured to promulgate—that each individual's diseases mark points in the infinitely small arc of an immensely great family curve, which may be ascending through generations to a "survival of the fittest," or descending through centuries to an *extinction of the unfit.* Most earnestly is this to be urged, because when popularly recognized it must lead to the compilation with religious truthfulness and care of such complete family records respecting diseases, that physicians of the future, acquiring therefrom a far more perfect knowledge of heredity, will be infinite gainers in accuracy of prognosis, success in treatment, and, best of all, in the power of preventing disease. J. G. R.

ART. XIX.—*Transactions of the International Medical Congress. Seventh Session held in London, Aug.* 2 *to Aug.* 9, 1881. In four volumes: Vol. I. pp. 519; Vol. II. pp. 599; Vol. III. pp. 660; Vol. IV. pp. 592. London: J. W. Kolckman, 1881.

IT may be confidently stated that no session of the International Medical Congress has been more successful than the seventh held in London. Whether this Congress is regarded from the point of view of the numbers in attendance, the eminence of the men who participated in the sessions, or the excellence of the papers, either the general addresses or the pieces submitted to the Sections, it must be considered as the most important of the series. It could hardly be otherwise. In this session of the Congress, the English-speaking members of the medical profession, had a prominent part, and they have always made the most substantial advances in medical knowledge. Admitting without question the learning, the science, and the painstaking work of our German colleagues, the brilliant powers of exposition, the logical acumen, and the original conceptions of the French, it must still be conceded, that to the great English physicians are due most of the important practical advances made in medicine during the century. It was but natural to expect much from an assemblage of the world's great medical men in the world's great capital—London. The highest expectations are fully satisfied on a perusal of the four portly volumes recording the work of the Congress.

The first volume is occupied with the list of delegates and members; the proceedings of the general meetings; the inaugural address of Sir James Paget; the general addresses by Virchow, Reynaud (read by Feréol), Billings, Volkmann, Pasteur, and Huxley; report on the Congress Museum, and the proceedings of the Sections of Anatomy, of Physiology, of Pathology, and of Materia Medica and Pharmacology.

The Congress was under the patronage of the Queen and of the Prince of Wales. "The first general meeting was honoured by the presence of His Royal Highness the Prince of Wales, His Imperial and Royal Highness the Crown Prince of Germany and Prussia, and a few visitors of distinction, among whom were the Archbishop of York, the Cardinal Archbishop of Westminster, and the Bishop of London."

The Prince of Wales has been a friend of doctors. Passing safely through an attack of typhoid fever, under the charge of Jenner and Gull, a few years ago, he has learned the value of skilled medical advice. It is greatly to his credit that he has not forgotten the men to whom he is largely indebted for his life. He not only appeared at the opening of the Congress, but induced his illustrious brother-in-law—*unser Fritz*—also a scholar and a man of science, to add to the splendors of the occasion by appearing on the platform. The Prince of Wales as "Patron," made a brief address, when Sir James Paget had taken the chair as President. The inaugural address by Paget made a profound impression on that vast assemblage. It was delivered *ex tempore*, and was a masterly summing up of the methods and purposes of the International Congress. Sir James Paget is said to be one of the finest orators in England. On this occasion he fully sustained his high reputation, and spoke in a manner to excite the admiration of all who heard him.

The first of the general addresses was delivered by Virchow in German, and was, as might be expected, a most able discourse, and triumphantly vindicated the modern methods of scientific research. As Sir James Paget said in his usual felicitous manner, this "address is, I am sure, one for which, however heartily we may thank him now, we shall often and as heartily thank him in the future; for we shall have it for reading and deliberate study; and the more we study it, the more it will prove itself to be an admirable instance of the rare combination of abundant pathological and historic knowledge, with the power of strong argument and clear statement for which Professor Virchow has always been renowned."

Social entertainments were elegantly interspersed with the purely intellectual exercises of the Congress. On the afternoon of the day celebrated by the delivery of Virchow's address, we learn that "the Prince of Wales and the Crown Prince of Germany and Prussia honoured the President with their company at luncheon, and a select party was invited to meet their Royal Highnesses. In the evening, on the invitation of Sir Wm. Gull, their Royal Highnesses dined at Willis's Rooms with a party of the members of the Congress."

The next general address was that of Dr. Maurice Reynaud *On Skepticism in Medicine Past and Present.* A melancholy interest attaches to this paper in that the accomplished author died just on the eve of the meeting. His friend Dr. Feréol, however, with great delicacy and good judgment performed the duty of reading the address which Dr. Reynaud had prepared. This paper is marked by all the characteristics of the best French medical work, and is an attempt to show the influence of an enlightened skepticism over the progress of medical science.

The evening following this address was utilized by a banquet given by the Lord Mayor of London in the Egyptian Hall. To the toast of our foreign visitors, response was made by Langenbeck, Trélat, Pantaleoni, and Austin Flint.

The best received of all the general addresses, was that by Dr. Billings, of our army, on *Our Medical Literature*. As regards manner of delivery, and matter, it proved to be more grateful to the literary sense of the audience, than those orations which possessed more scientific merit. The great English medical weeklies at the time bestowed warm praise on Dr. Billings's effort, and it was also the theme of much private commendation. Sir James Paget, the President, at the conclusion of the address, gave expression to the unanimous feelings of satisfaction, in saying, "I am sure I should express the feeling of you all, if I were to say that if this single paper were the sole production of the Congress, it was worth coming here to meet that it might be produced." High praise, truly, but not undeserved.

At the fifth general meeting there were two general addresses, and very notable ones they were: the first, by Prof. Volkmann, of Halle, *On the Progress of Modern Surgery;* and the other by Pasteur, *On Vaccination in Relation to Chicken-Cholera and Splenic Fever*. The latter detailed the methods by which these poisons could be so reduced in activity as to be safely inoculable—discoveries then new to the profession, but now known to the whole world. We need not, therefore, discuss the remarkable facts made known by the great Pasteur. The last of the general addresses was delivered by Huxley, *On the Connection of the Biological Sciences with Medicine*. This discourse is in the usual felicitous manner of this accomplished philosopher. It is largely occupied with the historical development of biology and medicine. His final judgment is expressed in the following paragraph:—

> "The search for the explanation of diseased states in modified cell life; the discovery of the important part played by parasitic organisms in the etiology of disease; the elucidation of the action of medicaments by the methods and the data of experimental physiology; appear to me to be the greatest steps which have ever been made towards the establishment of medicine on a scientific basis."

The last general meeting, which concluded the business of the Congress, was characterized by a series of congratulatory resolutions, and by the presentation of medals of honour to Prof. Donders, President, and Dr. Guye, Secretary-General of the last Congress, and to the authors of the general addresses of the present Congress, referred to above. The proceedings closed in a blaze of enthusiasm. The immense numbers in attendance, the illustrious personages who flashed on the scenes, the great scientific names present and participating, the excellence of the work done, and the unbounded hospitality and the brilliancy of the social entertainments, combined to make the London meeting an unclouded success.

Our British cousins, once for all, did away with their notoriety for social exclusiveness and insular prejudices. They demonstrated, what all who have seen anything of English physicians know to be genuine features of their character—a hearty hospitality, warmth of feeling, and sincere respect for character and ability. If somewhat reserved, when they admit one to friendship who deserves it, they become genuinely cordial. If they wish to be assured of the character of those who seek their friendship, they do not yield their faith, when once given, for idle reasons. As English physicians have always occupied the first place in respect to substantial improvements in medical knowledge, so, also, have they been foremost in maintaining the social position of the profession, their personal dignity, and their reputation for literary and scientific culture.

Before quitting the consideration of these topics, we should have something to say of the work of those who did most to make the meeting a success. Sir Wm. McCormac, the Hon. Secretary-General, must be first mentioned; to him, more than to any one else, should the credit be given. The Executive Committee, of which Sir James Risdon Bennet was Chairman, and the Reception Committee, of which Mr. Prescott Hewett was Chairman, worked with great zeal, the former, for two years or more, in preparing the vast details incident to the assemblage of so many delegates and guests, and the latter, in arranging for the reception and disposition of the members of the Congress. During the meeting the time of Sir James Paget and the other officers was wholly given up to the affairs of the Congress, and to the onerous social duties devolving on them. From the many in attendance we have heard but one opinion expressed, that the arrangements of all kinds were marvellously successful, and that in praise of those in charge too much cannot be said. When we reflect that all modern civilized nations were represented, and the number in attendance 3182, we can but wonder that so much was accomplished without jarring on the susceptibilities of any. Next to England and her colonies, the largest number of delegates and guests came from the United States, 220 in number.

As is the custom of the International Medical Congress, the officers were taken from the nation at whose capital the meeting was held. Hence, the President of the Congress, and the Honorary General Secretary, and the Presidents and Secretaries of the Sections, were English physicians. The International Congress of the Centennial year, held at Philadelphia, was an independent body, and not of the series of the European organization. At the London meeting, the profession of the United States was duly represented, and well and adequately recognized. As has already been stated, one of the general addresses was delivered by Dr. Billings, and papers in the Sections were read by Drs. Austin Flint, S. W. Gross, Sayre, Otis, Jacobi, Knapp, Jeffries, Lefferts, Cohen, Battey, Mundé, Gihon, Billings, and others, about thirty-five in all, besides the discussions participated in by many of those not reading original papers. We have no hesitation in saying that the contributions of the American delegates were, in general, not inferior to those of other nationalities.

Besides the general addresses above referred to, Volume I. contains the proceedings of the Sections of Anatomy, Physiology, Pathology, and Pharmacology. Referring only to those with which it is our province to deal, we begin with the Physiological Section, presided over by Dr. Michael Foster, of Cambridge. He chose for his inaugural address the part which English physiologists have taken in the construction of the modern science of physiology. Beginning with Harvey, he conducts us through the remarkable series containing amongst lesser names those of Willis, Hales, Hunter, Bell, Marshall Hall, all men whose work laid the foundation of modern physiology, and which no other nation can really equal. Foster concluded his address with a sorrowful reference to that absurd antivivisection legislation, which has not only hampered, but has almost stopped physiological research in England.

The proceedings of the Physiological Section were enlivened by a scientific tilt between Prof. Goltz, of Strassburg, and Ferrier, of London, in regard to cerebral localization. Goltz, having destroyed, as he supposed, certain areas of the cortex of a dog, produced results not in harmony with those obtained by Ferrier from the monkey. Now, as Ferrier maintained, a homology in the cerebral structure being admitted to exist, there should be a certain correspondence in the results in the two animals. It became necessary, therefore, to settle the question thus raised, and to determine the areas of the cerebral cortex of the two animals that had been destroyed. A committee was entrusted with this duty; the animals, Goltz's dog and Ferrier's monkey, were carefully examined, their damages ascertained, and they were then killed to fix the exact position of the supposed lesions. The result was that Goltz was found to have erred in the position and extent of the lesion which he supposed had been inflicted; whereas, Ferrier's claim was exactly verified. In this encounter, the Englishman had the better of his German antagonist most clearly. With a fine sense of poetical justice, Dr. Ferrier was arraigned by the Society for the Prevention of Cruelty to Animals, and made to answer before the police court for a violation of the vivisection act, in operating on animals without a license. Fortunately, the monkeys were proved to be the property of Dr. Yeo, who had a license, and Dr. Ferrier was acquitted.

Dr. François Franck, of Paris, gave an able address on *The Nervous Mechanism by which the Heart-beat is regulated and maintained.* He concludes, if we understand him aright, that the action has not been ascribed to the heart-muscle, which has the sufficient power of rhythmical contraction to which the nervous influence is secondary. "The influence of the cardiac ganglia is not indispensable to the production of the rhythmical movements of this organ," is his statement; and, again, that "the rhythmic function appears to be a property of the muscular fibre of the heart."

Dr. Gaskell, of Cambridge, in following Dr. Franck on the same subject, proposed a new theory of the action of the vagus nerve on the heart, based on a new method of studying the cardiac movements in cold-blooded animals. He concludes that the vagus acts directly on the muscular tissue of the heart, and not as a motor, but as a trophic nerve.

Dr. H. C. Wood, of Philadelphia, addressed the Physiological Section on animal heat. He began by defending the use of the calorimeter, which he regarded capable of "reliable results" when rightly used. He had nothing to say, however, of the manifest defects of the instruments now employed in such researches. He holds that the nervous system presides over both the production and dissipation of heat. His final conclusion is that "fever is simply the result of a depressing poison acting upon the nerve centres presiding over heat production and dissipation."

Prof. Rutherford, of Edinburgh, discussed *The Microscopical Appearances of Muscular Tissue during rest and contraction*, and Dr. Klein *Some Points on the Structure of Cells and Nuclei.* One of the most important papers presented to the Physiological Section, was that of Prof. Donder's entitled *New Researches on Optical Systems.* It is, however, too technical and mathematical to be of general interest.

The Section on General Pathology and Morbid Anatomy was presided over by Dr. Samuel Wilks, F.R.S. There were several papers on tubercle, and an interesting discussion in which Virchow participated. The most important contributions were on the subject of minute organisms, the first one by Prof. Lister relating to the influence of micro-organisms on the condition of wounds, and on the inflammatory process, and one by

Prof. Klebs on the question of the action of germs in the production of specific diseases. This subject was also discussed in separate papers by Prof. Fokker, Bouchard, Béchamp, and Dr. Geo. Harley. In the course of the discussion on tubercle, Virchow made a prophetic declaration in regard to the effect the discovery of a minute organism would have in simplifying the theories of the origin of tubercle. The space occupied by these papers, and the interest of the discussions, show how important to modern pathology has become the question of micro-organisms.

The morbid anatomy of Bright's disease was discussed in papers by Sir Wm. Gull and Dr. Sutton, by Lancereaux, by Johnson, by Grainger Stewart, and by Saundby. The relation between the kidney and the vascular changes was especially the subject of inquiry. Our readers will probably recall the sharp, almost acrimonious, discussion between Gull and Sutton, on the one hand regarding their theory of an arterio-capillary fibrosis, and Dr. George Johnson on the other, regarding his doctrine of hypertrophy of the muscular layer of the vessels. Both parties have forgotten something and learned much. The mutual concessions which have since been made, and the new studies of the German and French pathologists, leave the question of the changes in the vessels occurring in chronic Bright's disease in about the following shape:—

First, it is now universally conceded that the walls of the vessels in this disease are hypertrophied. Second, the hypertrophy consists in part in an increase of the muscular elements as claimed by Dr. Geo. Johnson. Third, the connective-tissue elements, also, undergo a hyperplasia of an inflammatory kind, somewhat as claimed by Gull and Sutton. So here, as is usual in such disputes, the truth lies not exclusively with either, but is embraced to some extent in the theories of both parties.

Dr. Dreschfeld and Mr. Stocks, of Manchester, England, described a case of hæmoglobinuria, produced by large doses of chlorate of potassa —one and a half ounces, in twenty-four hours. The history of such a case is very important. Soon after taking the remedy the woman became suddenly ill, had dyspnœa, was cyanosed, afterwards slightly jaundiced, and vomited and passed by stool masses of hæmoglobin. The urine also contained hæmoglobin. She died on the fourth day. The blood was fluid, dark brown, and contained an excess of leucocytes; the spleen was swollen and soft; the convoluted and straight tubes of the kidneys were filled with pigment granules, and with disks, the size of blood corpuscles; and the glomeruli were perfectly intact. All other organs appeared to be healthy. Dr. Stephen Mackenzie reported some other cases in which hæmoglobinuria was produced by chlorate of potash. He also called attention to a series of cases of diphtheria treated by Dr. Kusher with the chlorate, in which the heavy mortality seemed to be explained by the administration of this remedy. Our readers must be familiar with the warning given by Dr. Jacobi, regarding the use of chlorate in diphtheria. The vast array of facts now in our possession respecting the toxic activity of the potash salts, should render us circumspect in their use.

Besides the foregoing, we find some excellent papers, on points in the histology of the spinal cord, by Dr. Kesteven, of London; on the pathological anatomy of primary lateral sclerosis, by Dr. Dreschfeld, of Manchester; on calcification of epithelioma affecting the sebaceous glands, by Dr. Malherbe, of Nantes; on aneurism of the cerebral arteries, and on the extension of lympho-sarcoma, by Dr. Joseph Coats; on fibroid degeneration of the heart, by Dr. Turner, etc. It must be granted, we think, that the Section on Pathology, did much valuable work. They discussed some of the most important questions of the day, and if they prepared the way for the final settlement of few, if any, they threw more or less light on all. Hardly any serious topic in pathology was passed over without some notice.

The last portion of Vol. I. is occupied with the proceedings of the Section of Materia Medica and Pharmacology. The space thus filled is from page 441 to 519 inclusive. The Section was presided over by Prof. Thos. R. Fraser, of the University of Edinburgh. In his very able inaugural discourse, Prof. Fraser first defined the work of the Section; then showed that the experimental method is the true mode of advancing knowledge in this department, illustrating this point by some very striking examples; and finally alluded with some asperity to the hindrances to the experimental method, to which they were subjected in England by the vivisection law.

The first paper was by Dr. William Squire, of London, on ethyl-bromide, or bromic ether. After an account of its chemical and physical properties, Dr. Squire showed that it might be used as a local anæsthetic, as a general anæsthetic, and when moderately inhaled, as a means of lessening nervous and vaso-motor disturbance. As a local anæsthetic, Terrillon proved that it was superior to all other agents. It evaporates readily, and destroys sensibility before freezing of the part is effected. It affords relief to deep-seated pain when applied as spray. Dr. Squire refers to the unfortunate history of ethyl-bromide as an anæsthetic, as it occurred in this country, and it is not as a general anæsthetic that he proposes its use now. As Prof. G. Sée used iodide of ethyl in asthma, and in other cases where the iodides were indicated, so, Dr. Squire proposes the inhalation of bromide of ethyl, in diseases where the bromides are beneficial. He finds that unconsciousness need not be induced. He drops on a square-inch piece of lint twenty to thirty drops of ethyl-bromide, and this placed on a handkerchief is held over the mouth during three or four inspirations. He finds such inhalation of decided benefit in certain neuroses, vaso-motor especially, in renal dyspnœa, laryngeal spasm, some kinds of vertigo, etc. As this agent relaxes vascular tension, it is useful when a condition of vaso-motor spasm is present.

Dr. Fothergill presented a paper intended to emphasize the fact that strychnia is a stimulant of the respiratory centre, and an agent of great value in respiratory depression. Drs. Brunton and Smith supported the statements of Dr. Fothergill. Papers on antipyretics, by Prof. Binz, Prof. Fokker, Dr. Donath, and Prof. Ceci followed. The drift of the observations was that a certain relation exists between the antiferment power and the antipyretic action; that agents having the power to destroy the germs or minute organisms of disease, or morbific ferments, arrest the fever process produced by the multiplication of those organisms or ferments in the blood. In the discussion which followed, Prof. Wood brought forward his calorimeter again, and insisted upon the distinction in the action of an antipyretic whether it prevent heat production or facilitate heat dissipation. This seems like a vague crying out in the wilderness, for do not those remedies which increase the capillary circulation and thus favour radiation of heat, rather raise than depress temperature? Papers by Dr. Dujardin-Beaumetz on pelleterine, etc.; by Prof. H. C. Wood, on the nature and limits of physiological antagonism; by Dr. Squire, on pilocarpine; by Dr. Hay, on the action of saline cathartics; by Prof. Boehm, on the action of remedies affecting the heart and the blood pressure (in German); by Dr. Gaskell, on the effects of atropia and muscaria on the heart; by Dr. Gibson, on the physiological action of duboisia; by Prof. Rossbach on papayotine, and, finally, by Dr. Roberts on peptonized food. These are interesting and valuable papers, but they call for no special comment. Take them all in all, the proceedings of the Materia Medica Section, are of great value. They possess more distinctly practical qualities than most of the papers presented to the Congress, and will therefore be relished by the practitioner, who can at once utilize the observations offered him.

During the sessions of the Section, Prof. Stokvis, of Amsterdam, introduced the following resolution: "That in the opinion of this Section, the advancement of our knowledge concerning the action of medicines cannot be promoted without experimentation on the lower animals," which was carried with one dissenting voice.

Volume II. contains the proceedings of the Sections of Medicine, of Surgery, and of Military Surgery. We are concerned now with the Section of Medicine only. Sir Wm. Gull was President, and Drs. Dyce Duckworth and William Miller Ord were the Secretaries of this important Section.

The inaugural address, by Sir William Gull, was happily conceived and admirably expressed. After sketching briefly some of the great contributions to medical science made by men of the various nationalities represented at the Congress, he indicated some of the topics to be considered by the Section. He concluded in the words of Bacon: "It were a Heaven upon earth, to have the mind illumined by knowledge, to move in charity, and turn upon the poles of truth."

The topics discussed included Jacksonian epilepsy, syphilis as a cause of locomotor ataxia, nerve stretching, the tendon reflex, Addison's disease, gout and rheumatism, eczema and albuminuria in relation to gout, Bright's disease, auscultation and percussion, treatment of phthisis at high altitudes, influence of railroads on the nervous system of travellers, lead nephritis and arthritis, etc. The papers read on these subjects are of superior merit, and the discussions usually thorough and appropriate.

The first paper is by Dr. Hughlings Jackson, of London, on *Epileptiform Convulsions from Cerebral Disease*, and is an exposition of his peculiar views in respect to the mechanism of such seizures from lesions of the cerebral cortex. As his explanations have been largely accepted, and such epileptiform seizures are now entitled "Jacksonian epilepsy," it may be useful to place before our readers a very brief statement of Jackson's opinions. Those who have paid any attention to the progress of cerebral localization will remember that Ferrier originally undertook his course of experiment to ascertain the correctness of Jackson's theory regarding the existence of motor centres in the gray matter of the cerebral hemispheres —*the cerebral cortex.* It is known, of course, that Ferrier, as also Hitzig and Fritsche, and Nothnagel demonstrated numerous volitional centres in the cortex. If a motor centre exist in the gray matter, it follows that when the will acts, regular and orderly muscular movements must follow. It also follows according to Jackson that when irritation is applied to such a motor centre that irregular and disorderly movements will result—in other words, convulsions will occur.

The impression of the will starts an impulse which originates in the motor cells. and such impulse is the evidence of the normal or physiological condition of these cells. Irritated by pathological new formations, an impulse is also originated, but it is of a kind inducing disorderly movements, or convulsions. Such lesions are said by Jackson to be "discharging;" that is, due to the discharge of nervous force accumulated under abnormal conditions, which to him is a highly "unstable" state of the cells. Having discharged all the energy stored up in these cells, they for the time being are unable to functionate—hence the paralysis, the aphasia, and other impaired functional states which sometimes follow epileptiform seizures. Dr. Jackson's communication was followed by a paper in German by Dr. Franz Müller, of Graz, in which he reports a case of circumscribed lesion supporting the theory of Dr. Jackson. This paper is illustrated by a drawing showing the area of the lesion of the cortex producing the convulsive phenomena.

Dr. Buzzard, in an interesting paper, *On Certain Little-recognized Symptoms of Tabes Dorsalis*, shows that persistent and severe gastric derangement, atrophy of the optic nerve, and sudden failure of muscular power in both limbs, may be symptoms merely of tabes. In such cases an examination of the "knee jerk" may at once indicate the character of the case.

Dr. Erb maintained, in a communication in German, that a large proportion—almost all, indeed—of the cases of tabes (locomotor ataxia) owe their existence to syphilitic infection. In the discussion which followed, whilst this pathogenetic factor was admitted to be very influential, it was not held to be so universal as considered by Erb. All who took part in the discussion, except Rosenstein, of Leyden, refused to accept Erb's assumption, and these were Althaus, of London; Gairdner, of Glasgow; Lancereaux, of Paris; and Zambaco, of Constantinople. The subject of nerve-stretching for the relief of this disease, was introduced by Dr. Carl Langenbuch, of Berlin. All agreed that in most cases some benefit resulted, and, in many, a remarkable improvement ensued. Amongst those engaging in this discussion were Erb, Müller, Benedikt, Grainger Stewart, and Eulenburg.

A very thorough memoir on Addison's disease was presented by Dr. Greenhow. Having in his Croonian lectures discussed the nature of this peculiar malady, and having made it the subject of special study since, he here presents the latest results of his investigations. He holds that the remarkable asthenia, the strange pigmentation, and the other phenomena of this disease, have their origin in an inflammation of the suprarenal bodies, and of the neighbouring nerves composing the solar plexus. In the discussion which followed, the most emphasis was laid on the changes in the solar plexus.

A very suggestive paper was read by Dr. Clifford Allbutt, of Leeds, *On the Treatment of Scrofulous Glands*. He maintained a doctrine coincided in by all who took part in the discussion, that scrofulous disease of the cervical glands often has its origin in affections of the throat, teeth, ears, and of the skin of the face. Once glandular suppuration is inaugurated, an extension of the disease may take place to the bronchial glands, to the lungs, etc. At first, therefore, it is a purely local affection, and the treatment should correspond. He advocates extirpation of the affected glands at once, and before diffusion takes place, and the cases narrated, certainly, confirm the accuracy of the deduction. The disease seems to be promptly cured, and the deformity is trivial compared with that due to the suppurating sinuses.

The subjects of the relation of gout and rheumatism, by Mr. Hutchinson, and of eczema and albuminuria in relation to gout, by Dr. Garrod, gave rise to free discussion. Mr. Hutchinson maintained that there is a close relationship between rheumatism and gout, and that rheumatoid arthritis is properly an admixture of the two. These rather retrograde opinions were warmly opposed by Dr. Duckworth in an excellent speech, and also by Dr. Garrod. The presence of albumen in the urine in gouty subjects is due, according to Garrod, to the deposit of urate of soda between the tubuli. This takes place, as his statistics show, in about one-fourth of all the cases. Eczema is also a frequent concomitant of the gouty diathesis, occurring, according to Garrod, in eighteen per cent. of the cases.

The various forms of Bright's disease was discussed in papers by Prof. Grainger Stewart, of Edinburgh, by Prof. Rosenstein, of Leyden (in German), by Dr. George Johnson, of London, and by Dr. F. A. Mahomed, of London. We have already referred to several papers submitted to the Pathological Section. Stewart's paper is clinical chiefly, and is occupied with the examination of the urine as a means of diagnosis; Rosenstein treats elaborately of the distinctive forms of Bright's disease; and Dr. Geo. Johnson discusses the diagnosis of Kleb's glomerulo-nephritis. All of these papers possess a high degree of merit, and well deserve a more extended examination than is possible in this review. A paper nearly related to these subjects appears elsewhere in the proceedings; it is by Dr. Lancereaux, of Paris, and is entitled *Néphrite et Arthrite Saturnine.* It is intended to prove the coincidence of these affections, and to show the correspondence between the plumbic and the gouty affections.

Prof. Austin Flint, Sr., of New York, read a valuable paper, entitled an *Analytical Study of Auscultation and Percussion, with Reference to the Distinctive Characters of Pulmonary Sounds.* This piece, as is usual in his work, makes the impression of thoroughness, sincerity, and ability. It is intended to simplify the methods of auscultation and percussion, and to make them more precise in their application. This paper is followed by a "note on the value of Baccelli's sign, in the differential diagnosis of pleuritic effusions." This sign consists in the transmission of a whisper through serum; whereas it is inaudible if the fluid be purulent. The ear is placed at the inferior angle of the scapula, and the patient is directed to whisper "one," "two," "three." Dr. Douglas Powell, who presented the paper, narrates a number of cases in which Baccelli's sign was of distinct value associated with other signs of pleuritic effusion, but it is by no means infallible. Prof. Ewald, referring to it in the course of the discussion, maintained that the best means of differentiating as to the characteristics of the fluid is to withdraw some by means of the syringe.

A distinctly new malady is described by Dr. Roberts, of Manchester, under the title *Bacilluria*, and is a form of urinary disorder in which rod-shaped bacteria are discharged in the urine. The symptoms are, in the main, those of irritation of the urinary organs, and are similar to those due to the presence of stone in the bladder. The urine is acid in reaction, opalescent, and full of bacteria; it does not decompose readily, does not become ammoniacal, and there are not present the organisms of putrefactive decomposition. The administration of full doses of salicylate of soda acted promptly in affording relief.

One of the most imposing in respect to length, and practical in respect to character, is the paper by Dr. C. Theodore Williams, of London, on

The Treatment of Phthisis by Residence in High Altitudes. The conclusions reached are that curative effects are obtained from sufficiently prolonged residence in mountain altitudes. The capacity of the thorax increases, the breathing power becomes greater, and the character of the local morbid process is gradually modified. Dr. Hermann Weber, and Dr. Wilson Fox, of London, Dr. Herbert, of Paris, and others taking part in the discussion, coincided with Dr. Williams in the favourable view taken of the influence of altitude on the progress of pulmonary consumption.

We find in the proceedings of the Medical Section other papers of less importance than those above referred to, but we cannot do more than merely state that they will, without exception, well repay reading. We discover nothing in the transactions of the medical or other Sections thus far examined which had better be omitted, except the meaningless remarks of an irregular practitioner (a homœopath we believe) from Cincinnati, who got into the Materia Medica Section and amongst the list of members by some process only known to such gentry. It is to be regretted that greater care could not have been exercised in scrutinizing the credentials of supposed regular physicians, who, coming from a distance, had no authority to represent the local medical bodies. Where the number reaches so large a proportion as three thousand, it becomes difficult to give sufficient examination to the credentials of every person coming forward for registration. Furthermore, it is impossible under such circumstances to ascertain the genuineness of papers supposed to be given by distant and unknown associations.

The only part of the third volume which comes within our province is the proceedings of the Section of Mental Diseases. Dr. C. Lockhart Robertson presided, and the vice-presidents were Drs. Crichton Browne and Henry Maudsley. The only representative from the United States was Dr. A. E. Macdonald, of New York; the only representatives from foreign countries were Prof. Benedikt, of Vienna, Drs. Foville, Motet, and Lasègue, of Paris, and Prof. Tamburini, of Italy. The proceedings, although of fairly good quality are rather meagre. The inaugural address of the president on *The Present Condition of the Insane in England* was most appropriate and also thorough in the treatment of the subject. The much discussed question of the increase of insanity in England, is by Dr. Robertson, answered in the negative. He finds that the ratio of insane to every 10,000 of population was in 1860 19.1, and in 1880, 27.9, but the variation is in the pauper class, amongst whom the increase of lunatics is merely apparent, and due, as the Scotch commissioners in lunacy say, to "an increasing readiness to place persons as lunatics in establishments." There are 43,700 lunatics in the public asylums of England, and of these 40,000 are paupers. About 43 per cent. of the private insane are in private hospitals which are licensed and visited by the lunacy commissioners. The cottage system has also been adopted with considerable success in Scotland, and is now being introduced into England. The whole of Dr. Robertson's address is full of important matter, which may be read with profit by all interested in such questions. The president's address is followed by a paper on *Mégalomanie* by Dr. Foville, of Paris. This term proposed by Dagonet, applies to cases of mental derangement with ambitious and expansive notions, and is distinguished from dementia paralytica, in that the delusions are fixed, systematic, and progressive. Dr. Fournié, of Paris, presented a paper on the physiological pathology of hallucinations, which was concerned chiefly with a proper classification. He maintains that the mechanism of hallucinations is the same as that of normal memory, and they should be classified according to the function involved.

Dr. Haller, of Vienna, and Dr. Savage, of London, gave accounts of modes of preparing microscopic section of nervous tissue, and Dr. Clouston, of Edinburgh, discoursed on the teaching of psychiatric medicine. Prof. Ball read a paper on the mental derangements of paralysis agitans, concluding that such mental derangement is more common than is supposed, in the slightest cases consisting merely of irritability, and in the severest of insanity. He finds, further, that there is no connection between the severity of the symptoms, and the impairment of the faculties.

There are two elaborate papers on allied topics; the first, *On some Cranial Characteristics of Idiocy*, by Dr. Shuttleworth, and the second, by Dr. Beach, *On the Morphological and Histological Aspects of Microcephalic and Cretinoid Idiocy.* No mere abstract will do justice to these papers. Dr. Benedikt, of Vienna, presented a paper on the *Brains of Criminals*, the lesson of which is that "there exists another type of human brain, divergent from the natural one, and most of my criminal brains belong to that type." It follows that a brain being given, an expert will determine the moral type of the individual. Dr. Crichton Browne held that Dr. Benedikt's examples were brains of a simple type, undeveloped, and that he would fail to pick out twenty brains of criminals mixed with a hundred brains of ordinary people.

Besides the foregoing, papers were read by Dr. Hack Tuke on "Mental stupor;" by Prof. Lasègue, on "epilepsy;" by Dr. Bucknill, on "testamentary capacity;" by Dr. Ashe, of Dublin, on "the race relationship of general paralysis;" on "moral insanity" by Dr. Hughes, of St. Louis, United States, and others of less or greater value, of which abstracts are given.

We have for consideration, finally, the proceedings of the Section for Diseases of Children. This seems to have been one of the most successful of the Congress. Its work is recorded in 232 pages, and representative men in this department of medical practice participated. The Section was presided over by Dr. Charles West, and amongst the Americans present were Drs. Jacobi, J. Lewis Smith, and Sayre, of New York. We cannot praise the address of Dr. West. He apologizes, it is true, for lack of opportunity to prepare a suitable one, but he exhibits lamentable deficiencies when he attempts to sketch the progress of knowledge in the department of children's diseases. Four elaborate papers were devoted to *Rötheln*, or German measles, by Drs. Cheadle, of London, J. Lewis Smith, of New York, Shuttleworth, of Lancaster, and Squire, of London. It was concluded that the disease corresponds neither to measles nor scarlatina and is not preventative of either, and is, consequently, a disease *sui generis.*

A series of papers on rickets followed: The first by Prof. Parrot, of Paris, who maintains the identity of rickets and secondary syphilis; the second by Dr. Bouchut, who strongly controverts the opinion of Parrot, and the third by Dr. Rehn, of Frankfort, who, also, is opposed to the view of the causative relation of syphilis. In the discussion which followed, only Dr. Gilbert, of Havre, supported Parrot; Dr. Jules Guérin, Prof. Ranke, of Munich, Dr. Sansom, of London, Dr. Robert Lee, of London, and Dr. Jacobi, of New York, opposed his views.

Several papers on diphtheritic paralysis followed—from Dr. Jacobi, of New York, Dr. John Abercrombie, of London, and Dr. Squire, of London. The main diagnostic symptoms, according to Jacobi, are the first occurrence of the paralysis in the pharynx and ocular muscles, the irregularity in the diffusion of the symptoms of paralysis, and the intact condition of the sphincters. The spread of diphtheria and its contagiousness, were the subjects of elaborate papers by Drs. Hubert Airy, of London, and Jacobi, of New York.

The subject of chorea in children, and its relation to rheumatism, was discussed in important papers by Dr. Steffen, of Stettin, Dr. Stephen Mackenzie, and Dr. Sturges, of London, Dr. J. W. Byers, of Belfast, and Drs. Barlow and Warner, of London. The point of most novelty in this discussion was the subject of the last-named memoir. Drs. Barlow and Warner describe cases of rheumatism and chorea in children, characterized by the occurrence of subcutaneous nodules, connected with fibrous tissues, and having the usual type of rheumatic inflammatory products. The intimate relation of chorea and rheumatism was urged in all the papers. Changes in the mitral valve were described by several observers, when no bruit and no rheumatic symptoms existed during life. The embolic theory of chorea receives support from these facts, but as yet no direct evidence has been furnished.

The subject of the changes in the permanent teeth, of syphilitic origin, was the subject of a paper by Dr. Magitot, of Paris. In the discussion which followed, Mr. Hutchinson being the principal speaker, it was clearly brought out that the deformity of syphilitic origin was readily differentiated from those due to mercurialismus, stomatitis, etc. What is known as the "honeycomb tooth," is, as Dr. Magitot and Mr. Hutchinson both asserted, not of syphilitic origin. The distinction lies in the fact that the deformity due to syphilis is an arrest of development of a peculiar kind, and not an erosion. "The upper central incisors of the permanent set are affected by an arrest in the growth of the middle denticle, leaving a single central notch." Such is Mr. Hutchinson's statement. Furthermore, he holds that "there is usually a dwarfing of the tooth in all its dimensions, and sometimes a screw-driver form of tooth is almost as characteristic as a notched one."

The application of Sayre's jacket, its uses and abuses, and the accidents sometimes resulting, were discussed in papers, by Dr. Da Cumba Bellem, of Lisbon, Mr. Golding-Bird, of London, Mr. Henry F. Baker, of London, and Mr. Walter Pye, of London. Dr. Sayre was present and took part in the discussion. He showed how errors had crept into the matter of jacket treatment of spinal injuries, for which he was not only not responsible, but against which he had protested from the beginning. The Vice-President, Mr. Holmes, in summing up the results of the discussion, indicated the various difficulties connected with the application of the plaster jacket, some of which are not surmounted, but his final conclusion was expressed in these words: "The general opinion seems to be that this is a real and a great advance in practical surgery."

Two papers were read on the nature of the scarlet fever which sometimes follows operations on children, and it was decided that this is really a scarlet fever of coincident appearance and is not due to the surgical procedure.

A number of papers appear on the treatment of genu valgum, but as this is a purely surgical topic, we pass on to consider those of medical character. The surgical treatment of strumous affections, and resections of joints were topics of great interest to which we can merely refer. A practical paper on the solution of the false membrane of diphtheria by the new digestive principle—papäine—was read by Dr. Bouchut, of Paris. He employs a solution of two grammes of papäine (about ʒss) in eight grammes (about ℥ij) of distilled water, to which is added five centigrammes of salicylic acid. Of 46 cases treated by the local application of this solution, 40 were cured. Finally, a practical paper, by Dr. Madden, *On Some Points in the Etiology and Treatment of the Tuberculous and Scrofulous Diseases of Infancy and Childhood*, closes the proceedings of the Section. It is a discussion of the various expedients, dietetic, medicinal, and climatic, employed in the treatment of these affections, and, although useful, is not new.

In closing this review of those portions of the proceedings allotted to us, we can but re-echo the plaudits bestowed on the work of the great Congress. Our readers, we doubt not, will agree with us, that the scientific work of this illustrious body of *savants* was not obscured by the social success of the meeting. Notwithstanding the attractions of the great capital, and the excursions and entertainments, the proper work of such a Congress was not neglected. Our own annual gatherings may profitably contemplate such an example, and learn the useful lesson, how to combine a high order of scientific and professional work, with due attention to social enjoyment. R. B.

If the International Medical Congress of 1881 had accomplished nothing else, a glance at the handsome volumes in which its transactions appear would prove that it had contributed a vast amount of material to medical literature. When the character and quality of this material comes to be examined, speaking of that which was contributed to the Surgical Section of the Congress, we can pronounce favourably upon it, and can give to it a most hearty commendation without fear of contradiction.

Upon reading the address of the President, Mr. Erichsen, one reason of the eminent success which attended the Congress is very evident, namely, the care which was given to the choice and arrangement of the subjects which were brought before the Section. These were eight in number.

It is equally apparent that the papers read, and the discussions had, upon several of the subjects chronicle the most decided advances in surgery, and it is this feature of the work before us which makes it one of much encouragement to those who look forward hopefully to the future of their science. We have been for many years accumulating observed facts, and the tendency of some observers has been rather to merely show the existence of pathological changes than to speak hopefully of medical measures, but here we have a series of papers principally connected with the therapeutics of surgery.

Mr. Erichsen points out that, while some of the new measures recommended are only novelties, or reversions to old methods, others mark most decided and almost astonishing advances in treatment.

The first subject before the Section was the *Treatment of Aneurism by the Elastic Bandage*, and as we have, in the previous issue of this Journal, given a full notice of Mr. Gould's paper upon it, we shall pass it by to take up the consideration of the next topic.

This was practically abdominal surgery, the most important subject which came before the Section, and the one in which the most revolutionary practices have been successfully introduced of late years. The opening paper on *Recent Advances in the Surgical Treatment of Intra-peritoneal Tumours*, by Mr. T. Spencer Wells, will be read eagerly, as embodying the views of one whose experience is almost unique in its extent, and who himself has had so much to do with these advances. After a brief summary of the progressive steps which have been taken within the memory of men of middle age, Mr. Wells devotes himself to those points which he thinks have had much to do with the improved success that attends operations upon the abdomen. The first of these is the union of divided edges, or separated surfaces of peritoneum. Mr. Wells exhibited the specimens by which, in 1859, he proved that the serous surfaces must be brought in contact with each other in order to secure adhesion, while the edges of the structure are everted, just the opposite of the conditions required where cutaneous incisions are involved. This has long since become axiomatic in surgery, and Mr. Wells tells us that he should not have thought it worth while to refer to it had he not been attacked by some foolish people, who assailed him, because, to ascertain the facts, he found it necessary to inflict pain upon, and even deprive of life, some brutes. Woman has been the principal gainer by Mr. Wells's experiments, and yet women will give time, money, and life itself, to societies which, while seeking to protect brutes from cruelty, actually promote cruelty to humanity. Mr. Wells gives the second place in his enumeration of advances, to the clip forceps, which are applied temporarily to restrain hemorrhage, and are most effectual in diminishing the loss of blood. The third, and last point upon which Mr. Wells dwells, is the mode of dressing. He does not go into the subject at length, as the antiseptic method is made a theme by itself, but he tells us that, while he adopts an antiseptic dressing, he has not found it expedient to use drainage-tubes for three years, and that he thinks he has been largely a gainer by their omission.

Mr. Lawson Tait follows, with some remarks upon the whole subject of *Abdominal Surgery*, and a brief narration of the wonderful results achieved by him. Of those results the readers of the Journal have been informed by Mr. Tait himself, in an article, contributed to these pages. It is sufficient to say that it becomes apparently a mere matter of diagnosis in many cases, and provided that can be made with accuracy, we may hope to remedy many conditions, which, a very few years since, were irremediable. Altogether Mr. Tait has opened the cavity of the peritoneum, for various reasons, no less than sixty-six times within the last few years, with a total mortality of 4.5 per cent. Certainly a most remarkable showing, and one which our immediate predecessors would have regarded as impossible. When we come to inquire into the causes for this great change, we do not find it in the much-vaunted system of Lister, for neither Mr. Tait nor Dr. Keith use carbolic acid, though they do use thorough drainage. We naturally suppose, therefore, that in drainage is to be found that which has caused all this transformation, but Mr. Wells, it will be remembered, claims to have omitted drainage-tubes with advantage, while still adhering to modified Listerism.

The difficulty of arriving at a definite and decided conclusion in this matter was well illustrated by the discussion which followed the opening papers, in which Thornton, Keith, Bantock, and Heywood Smith, of Great Britain, Martin and Volkmann, of Germany, and Marion Sims, Wilson, Marcy, and Dunlap, of this country, took part. When some of these adepts deny the virtues of carbolic acid and exalt those of drainage, while others hang their confidences upon antiseptics and think little of drainage, and some rely upon neither, it is evident that the real cause for the great modern improvement in the treatment of these cases lies deeper. As we read over the remarks of these authoritative speakers, and compare them with our own experience, we think three elements lie at the foundation of the matter: 1st, wounds of the peritoneum are not so dangerous as they were once supposed to be, especially 2d, when proper antiseptic precautions are observed. By antiseptics we do not mean any of the special agents which have been considered to possess such virtues, but rather that attention to cleanliness, which will prevent the admission of any ferment which may hasten putrefactive changes, and that attention to securing a free exit to any accumulations of fluid, which, when pent up, undergo putrefaction, and then become active septic agents. The third element of success, we think, is to be found in the improved methods of operating, which, by a more minute attention to details, in lessening hemorrhage, and therefore shock, and in leaving as little fluid in the abdominal cavity as possible, diminishes very much the dangers resulting from putrefactive changes.

The Diseases of the Kidney which admit of Relief by Surgical Interference, was the subject which next occupied the attention of the Section. Papers were read by Prof. Czerny, of Heidelberg, and Messrs. Baker, Barker, Lucas, and Barwell, of London. Prof. Czerny's communication contains a table of no less than 72 cases of operations upon the kidney. Mr. Barker's paper consists of a critical examination of the merits of the operation, which has for its aim the removal of stones situated in the kidney or its pelvis. He thinks that an early diagnosis can often be made by palpation, by the existence of pain, and by the presence of hæmaturia, and he recommends the exposure of the kidney, and its exploration, if necessary, by punctures with a fine needle, and does not believe the integrity of the organ will be seriously affected by the proceeding. Mr. Barker lays much stress upon the importance of an early operation. He thinks that when several small stones exist, when one large one is present, or the pelvis is extensively encrusted with calculous matter, removal of the entire organ offers much the best prospect of success; but that where only one moderately-sized calculus is revealed by the preliminary exposure of the kidney, it is best to remove it by an incision into the organ. The question as to how late, in the progress of these cases, it is justifiable to resort to nephrectomy is one of much difficulty, and cannot be settled by general rules. Each case must stand by itself, and a decision be arrived at by a careful study of the special symptoms present. The other papers are narrations of cases, and we confess, to some surprise, that the discussion that followed was neither extended nor exhaustive.

The paper with which Sir Henry Thompson introduced the subject of *Recent Advances in the Methods of Extracting Stone from the Bladder*, is judicial in tone, and most instructive. He points out that in the long-established operation of lithotomy there has been little change, while in lithotrity and its modifications, there have been most decided ones. These changes have consisted very largely in instrumental inventions, and in the modes of their application. Thus he regards the method of Bigelow as a bolder and more extended application of the recognized principles upon which lithotrity has been founded, viz., crushing the stone and washing out the debris, by a more powerful lithotrite, a larger catheter, and a stronger suction apparatus. Dr. Bigelow was led to the adoption of these instruments by his conviction of the desirability of removing all calculous material *at one sitting.* It is in the prominence given to this principle by it, that Sir Henry Thompson appears to think the chief value of Bigelow's method consists. He points out that in some cases the principle can be very well carried out, without always resorting to the larger and more powerful instruments. The real value of Dr. Bigelow's principle, however, is shown in the fact that Sir Henry has very largely adopted it, and that during two years he and his assistant, Mr. Browne, have remedied no less than 104 cases of calculous disease by the one-sitting method. These, together with eleven cases, in which lithotomy was resorted to during the same period, are given in an appendix. They furnish no aid in determining the value of Dr. Bigelow's special apparatus, as the character of the instruments resorted to in each case is not mentioned. We have thought it important to give the carefully reasoned opinion of Sir Henry Thompson, as entitled to every consideration, both from the careful thought it evidences, and the vast experience which entitles him to speak with authority. First, it is unwise to use larger instruments than will fulfil the indication, as, while some urethræ exhibit a greater tolerance of distension than was formerly supposed to exist, in others a marked intolerance of such large catheters as are now frequently used, is manifested. The instrument should always be adapted to the size of the stone, and the surgeon should always aim at its removal by the smallest possible amount of mechanical action. The larger and more powerful instruments should only be used when the stone is of larger size than it has been found practicable to remove by the older and smaller apparatus. The neglect of this rule will bring discredit upon lithotrity, while, on the other hand, to resort to lithotomy in the case of a small stone, which could be easily and rapidly crushed, is to neglect the resources of our art. The importance of a correct diagnosis, so that the means may be adopted to the special case, and the early detection of the disease, are the second and third points upon which Sir Henry insists. The "perineal lithotrity" of Dr. Dolbeau is recommended in certain rare cases, and it is pointed out that where the stone is very large it is much better to crush it with a proper lithotrite, than to insist upon its removal entire through the lithotomy incision.

Dr. Bigelow follows in a thoroughly illustrated and well-written article describing the instrumental modifications he has lately devised with a general discussion of lithotrity. A good *résumé* of the subject is given. We incline to think that somewhat undue prominence is given to the extreme importance of special skill in the operation of lithotrity. There is nothing that tends more to deter surgeons from the adoption of a new operation than this talk about the very special skill required for its performance. Accurate anatomical knowledge, gentleness tempered with boldness, and a conscientious painstaking, very generally enable a surgeon to do any special operation sufficiently well for the good of the patient. We take it that the use of ether in this, as in other operations, has done much to deprive the surgeon of the advantage which at one time waited upon great manual dexterity and deftness. No doubt skill will accompany experience, but sufficient adroitness will generally be at the command of the fearless, gentle, and conscientious surgeon.

In the discussion which ensued upon this most important surgical procedure, some of the most eminent men present took part, and it is pretty evident that in their opinion the method of Professor Bigelow is regarded as a most important advance, and one which has done very much to extend the scope of lithotrity. There can be no doubt that this is the case, and that a grand step has been taken in advance. While claiming the most cosmopolitan and catholic views upon professional subjects, we may be pardoned a little feeling of self-congratulation that America, in the device of Professor Bigelow, has contributed another to the many valuable measures she has given to surgery.

The Relations between Adenoma, Sarcoma, and Carcinoma of the Mammary Gland in the Female; their Diagnosis in the earlier stages of the Disease, and the Results of their Treatment by Operation, was the subject of an able paper by Professor S. W. Gross, of Philadelphia, in which he advocated an early and extended operation, holding that when carcinoma exists, the best hope for safety lies in the removal of the entire organ, the overlying skin, and the axillary glands.

Resections received considerable attention. Professors Ollier, of Lyons, and Kocher, of Berne, read papers, while Dr. Sayre narrated the history of a case in which the hip-joint was reproduced in the person of a very much diseased child. From the cut furnished, a very close resemblance appears to exist between the side from which the joint was removed, and that in which it was left intact. Dr. Sayre also gave a synopsis of seventy-one cases of exsection of hip-joint for morbus coxarius. The discussion which followed was taken part in by many eminent men, and the drift of sentiment seemed to be in accord with the conclusions of the Clinical Society's committee, that while life is prolonged by a resort to excision, such a resort should not be made until it becomes evident that the progress of the case is downward, and the hope of guiding it to a successful issue is lost. Several speakers drew attention to the fact, which is so patent to those who have had much experience with these cases, that when recognized early, and subjected to proper treatment in the first stage, a good result is the rule.

Dr. Sayre's own synopsis of his cases does not present a picture sufficiently attractive to lead surgeons to generally follow his example. Out of a total of seventy-one cases of hip-joint exsection, he says, "forty-seven are now living with more or less useful limbs, and twenty-four are dead." While Dr. Sayre explains that but nine of these latter died from the exhausting effects of hip-disease, we can hardly be surprised that the opinion of the surgeons present seemed to be adverse to an early operation, nor in view of the fact that a large proportion of cases recover with more or less useful limbs without operative interference, can we wonder at the opinion evidently entertained by those who took part in the discussion. At the Children's Hospital, in Philadelphia, where a large number of cases of hip-joint disease are constantly under treatment, the general practice is that laid down by Küster, of Berlin, in the discussion which followed Dr. Sayre's paper, viz., to perform excision only when the general health begins to give way, and the plan has proved eminently satisfactory.

The treatment of wounds was the subject which next occupied the Section, and was discussed in a manner suited to its importance. The introductory paper was by Mr. Savory, who considered the causes of failure to obtain primary union. As a matter of course, the question resolved itself into the merits of *Listerism.* No one failed to declare himself on the side of antiseptic surgery, but in the opinion of Mr. Savory that method is best exemplified by scrupulous attention to cleanliness, and an intelligent waiting upon the physiological process of repair, rather than by any special dressing. Mr. Savory very fairly credited Listerism with having done much to promote that attention to cleanliness, and general sanitary improvement of the surroundings, which has been conspicuous in the surgery of the last few years, but he altogether denies that better results have followed from the use of carbolic acid, or any other so-called germicide, than has been obtained at St. Bartholomew's Hospital and elsewhere, without such agents. In support of his position he fearlessly appealed to the statistics he has compiled, and very properly maintained that their magnitude gave them a value which could not be gainsaid. Mr. Savory's speech was fair and able, but there is evident in it a sense of restraint, which would seem to indicate that the opponents of Listerism have been subjected to a kind of criticism, which makes them a little chary of the pronunciation of their opinions in the face of the popular and fashionable current of the day. The discussion which the subject received at the Congress must tend to show that the matter is not to be settled by confident assertion, that it is yet *sub judice*, and that there is developing a well-marked countercurrent, which had no existence a short time back. This countercurrent Mr. Savory represents very correctly, and the majority of those who spoke expressed themselves as very nearly in accord with his views, which are antiseptic, but not Listerian.

The importance of the subject is so great, and the standing of the speakers such, that we think it well to indicate the opinions expressed by each. Mr. Gamgee depends upon position, presence, rest, and perfect drainage, either by absorbent pads or drainage-tubes. Professor Humphrey relies upon the prevention of fluid accumulations in wounds, with extreme attention to cleanliness, and he regards antiseptic agents and drainage-tubes as valuable adjuvants in fulfilling these indications. Professor Volkmann, of Halle, is an outspoken advocate of the extreme Listerian views. He knows no suppuration independent of organic ferments. Perfect apposition and perfect disinfection are, in the opinion of Volkmann, the essential prerequisites to obtaining primary union, and perfect disinfection can only be obtained by the use of a germicide. The Professor announced himself as representing the views of those German surgeons who have adopted the Listerian method, and his views are certainly sufficiently definite and pronounced to suit even the first advocate of that method. Professor Esmarch, of Kiel, is also a Listerian, but he adopts a modification of the details, which he terms a permanent dressing. It consists of a compress soaked in a solution of iodoform in absolute alcohol, a similarly soaked bandage, and an enveloping elastic one. The escape of secretions is promoted by round holes in the skin made by a punch-forceps, through which are passed absorbable cartilaginous drainage-tubes. This dressing is not changed, and it is claimed to be most effectual. Indeed, the array of figures is most imposing, and one is almost inclined, upon reading them, to suppose that failure cannot attend its use, and that death cannot follow an operation at Kiel, unless by an unavoidable accident. If others have the same success with this dressing the ultima thule has been reached, there is no necessity to seek further. When a man has 388 considerable and capital operations, with only 7 deaths, and all of those occurring from some accident, he is unreasonable if he desires greater success to attend his career as an operating surgeon. Mr. Lund, of Manchester, announced his coincidence with the views of Mr. Savory, and his conviction that in perfect cleanliness there is the best prospect of obtaining perfect asepsis. The late Professor Greene, of Portland, whose death on his way home from the Congress caused so much regret, very properly protested against being ranged among the opponents of antiseptic surgery, because he was opposed to the use of carbolic acid, and referred to the success which he had enjoyed by attention to cleanliness, drainage, perfect apposition, and an external dressing of cotton-wool.

Dr. James Hardie, of Manchester, spoke briefly in advocacy of applying elastic pressure externally, by means of sponges, without drainage, aiming thereby to prevent discharge, rather than to provide for its absorption, although the sponge fulfils this latter indication admirably.

Mr. J. K. Barton, of Dublin, narrated his experience in treating sinuses by means of stimulating injections and an antiseptic dressing. Mr. F. J. Gant, of London, then gave his experience at the Royal Free Hospital, and announced his opinion that where the atmospheric and surrounding hygienic conditions are equally good, he was able to see no difference in the healing process of wounds treated by the Listerian method, and in that of those treated in other ways. He gave also some illustrative cases.

Professor Letiévant, of Lyons, while announcing his adoption of the Listerian method, and the very excellent results which it had exhibited in his hands, expressed his conviction that those results were more properly attributable to the cleanliness, and the protection afforded from infected hands and instruments by Listerism, than to the theory that wounds are contaminated by floating atmospheric germs.

To Mr. Lister it very naturally pertained to close this interesting and most important discussion. He spoke at length, and his remarks, having been extended before being printed in these transactions, are of much greater bulk than the utterances of any other single individual. Mr. Lister begins with expressing his surprise at the secondary place assigned to antiseptic measures by some of those who had taken part in the discussion. By antiseptic, of course, he must mean his own methods, for the sketch we have given sufficiently shows that all who spoke advocated antisepsis; none were foolish enough to favour septic measures, though they did not hesitate to dispute the correctness of Mr. Lister's theory, or to decline to adopt his peculiar methods. For our part we confess to some surprise to find Mr. Lister, to whose enthusiasm we owe so much, contending so vigorously for his personal theory. Like the Bourbons he seems to have forgotten nothing, and to have learned nothing, or he certainly would discern the signs which indicate a very decided change in the opinions of those who, at one time or other, have fallen in with his views, and he would be inclined to attach more importance to the ability and experience of those who took grounds against his theory.

After stating his reasons for thinking that the operation of ovariotomy was not suited for the exemplification of his method in its present state of development, he goes on to give the reasons which he thinks account for the great success which has attended this operation where none of his special antiseptic precautions are observed. Those reasons are the attention paid to cleanliness, together with the peculiar vitality and absorbent power of the vast peritoneal surface, and the unlikelihood of tension occurring in it. The remainder of Mr. Lister's speech is occupied with the narration of some experiments which have convinced him that the serum of the blood is not so well suited for the growth of micro-organisms as he had at one time supposed, and that the interposition of a layer of lymph, or a thin blood coagulum was often sufficient to prevent the extension of the inflammatory process, and by protecting the deeper parts from the air to really act as an antiseptic dressing. These observations he considers as amply accounting for the success of M. Guerin, Mr. Gamgee, and others, with dry dressings. While he very fairly expresses himself as willing to modify the steps of his process, should experience prove that they can be done without, he seems to us altogether to fail in comprehending that these latest and very special observations of his own, as well as the abundant evidence furnished by several of those who spoke, threaten to entirely overturn his theory, and to do away, not only with the spray, but with the whole cumbersome apparatus necessary to carry out his method. If coagulated serum or blood will make a wound antiseptic why not rely upon it alone. He naturally points with pride to Prof. Esmarch's results with a permanent aseptic dressing, and appeals to the oft-quoted instances of fractures, and other subcutaneous wounds, as unanswerable arguments to prove the correctness of his theories. Whether a close analogy between fractures and wounds, involving chiefly the soft parts, can always be made out, or whether the absence of acute inflammatory processes, so generally observed in fractures, can be proved to be always dependent upon the exclusion of the air, and its death-causing germs, are questions of importance, and cannot be dealt with here.

Numerous other papers were read before the Surgical Section of the Congress, and some of them possessed much individual interest, but they are incapable of being grouped together, and we cannot, therefore, speak of them in a review, which dealing with but a very small portion of these transactions has already attained such dimensions. Excepting a paper in which *the duality of venereal sores* was maintained very ably by Dr. Drysdale, and opposed with characteristic force by Mr. Hutchinson, we have now referred to all the discussions which took place. This was the limit we assigned ourselves at starting out, when even a cursory examination of the volume showed us that a selection must be made from the wealth of material included in its contents.

It remains but to make a few remarks upon the general character of the papers presented to the Congress, and now given permanency in its transactions. With very few exceptions they are noticeable for their brevity, and while brevity is regarded as the soul of wit, it is an excellence of even greater merit in these days of profuse publication. Brevity is not alone sufficient to make a readable article, but it goes a great way to secure general perusal, and he who neglects it must present many other excellences if he would secure the general ear of the profession. But the articles in this volume are more than brief, they are practical, both in the subjects treated and in the manner of treating them. In them is exhibited the efforts of men who are daily in the habit of grappling with perplexing issues, which involve the future of our science, and its beneficence to sick and suffering men. Nor, when we say that these articles are brief and practical, have we exhausted the terms of praise properly due to them; they have besides the weight which attaches to experience, for they come from the minds of men who have based their theories upon observation, and subjected them to the trying test of experience. And now we have exhausted our catalogue of commendations, brief, practical, and experimental, we know nothing better to be said of medical papers, and to most of the papers in the portion of the volume which has passed before us in review, these epithets do properly belong. The expedition with which these volumes appeared was on a par with the general excellence of the arrangements which prevailed at the Congress, and in a measure accounts for a good many typographical errors which appear in the text. S. A.